

IN THE CLAIMS

Please amend the claims as follows:

1.-79. (Cancelled)

80. (New) An RFID reader adapted to communicate with RFID tags, comprising:
an interface to receive an input at the RFID reader indicating at least one of a plurality of conditions pertaining to an environment of the reader, the conditions being one of a number of RFID tags in the environment, a number of other readers operating in the environment, and whether another reader operates at a frequency in a similar channel as the reader;
a controller to select one of a plurality of modulation formats based on the input; and
an antenna for communicating with the tags according to the selected format.

81. (New) The RFID reader of claim 80, in which
a different one of the modulation formats is selected depending on whether or not the number of tags in the environment exceeds a threshold.

82. (New) The RFID reader of claim 80, in which
a different one of the modulation formats is selected depending on whether or not the number of readers in the environment exceeds a threshold.

83. (New) The RFID reader of claim 80, in which
a different one of the modulation formats is selected depending on whether or not another reader has a frequency in a similar channel as the reader.

84. (New) The RFID reader of claim 80, in which
the selected modulation format corresponds to selecting at least one of a group of configuration parameters for the reader including a bit rate, cycles per symbol, subcarrier frequency, symbol assignment, and backscatter duration.

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85. (New) The RFID reader of claim 80, further comprising:
a demodulator, and
wherein the controller is adapted to configure the demodulator to demodulate a signal that is backscattered from at least one of the tags according to the selected format.
86. (New) The RFID reader of claim 80, in which
the antenna is adapted to transmit to the tags a signal for configuring the tags to backscatter by modulating according to the selected format.
87. (New) The RFID reader of claim 80, in which
configuring the tags includes causing the tags to select at least one of a group of configuration parameters including a bit rate, cycles per symbol, subcarrier frequency, symbol assignment, and backscatter duration.
88. (New) The RFID reader of claim 80, in which
the plurality of modulation formats includes at least one of a FMØ, a Manchester, a pulse width modulation (PWM), a frequency shift key (FSK), an amplitude shift key (ASK), and a phase shift key (PSK) modulation format.
89. (New) The RFID reader of claim 80, in which
the interface is a user interface, and
the input is manually provided to the RFID reader by a user.
90. (New) The RFID reader of claim 80, in which
the interface is a network interface to a further computer system, and
the input is received via a network from the further computer system.
91. (New) A method for an RFID reader to communicate with a plurality of RFID tags comprising:

receiving an input indicating at least one of a plurality of conditions pertaining to an environment of the reader, the conditions being one of a number of the RFID tags in the environment, a number of other readers operating in the environment, and whether another reader operates at a frequency in a similar channel as the reader;

selecting one of a plurality of modulation formats responsive to the input; and
communicating with the tags using the selected modulation format.

92. (New) The method of claim 91, in which
a different one of the modulation formats is selected depending on whether or not the number of tags in the environment exceeds a threshold.
93. (New) The method of claim 91, in which
a different one of the modulation formats is selected depending on whether or not the number of readers in the environment exceeds a threshold.
94. (New) The method of claim 91, in which
a different one of the modulation formats is selected depending on whether or not another reader has a frequency in a similar channel as the reader.
95. (New) The method of claim 91, in which
the selected modulation format corresponds to selecting at least one of a group of configuration parameters for the reader including a bit rate, cycles per symbol, subcarrier frequency, symbol assignment, and backscatter duration.
96. (New) The method of claim 91, further comprising:
configuring a demodulator of the reader to demodulate a signal that is backscattered from at least one of the tags according to the selected format.
97. (New) The method of claim 91, further comprising:
configuring the tags to backscatter using the selected modulation format.

98. (New) The method of claim 97, in which
configuring the tags includes causing the tags to select at least one of a group of configuration parameters including a bit rate, cycles per symbol, subcarrier frequency, symbol assignment, and backscatter duration.
99. (New) The method of claim 91, in which
the plurality of modulation formats includes at least one of a FMØ, a Manchester, a pulse width modulation (PWM), a frequency shift key (FSK), an amplitude shift key (ASK), and a phase shift key (PSK) modulation format.
100. (New) The method of claim 91, in which
the input is manually inputted by a user in a user interface, and received via the interface.
101. (New) The method of claim 91, in which
the input is inputted by a computer system in a network interface, and received via the interface.